



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,108	02/26/2004	Scott M. Stole	10139.31US01	7594
7590 10/18/2006			EXAMINER	
Merchant & Gould P.C. P.O. Box 2903 Minneapolis, MN 55402-0903			ARBES, CARL J	
			ART UNIT	PAPER NUMBER
			3729	
DATE MAILED: 10/18/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/789,108

Applicant(s)

STOLE, SCOTT M.

Examiner

C. J. Arbes

Art Unit

3729

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) 23-41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Applicant's remarks re the Office's Restriction Requirement have been carefully reviewed and have held not to adequately rebut said Restriction. The original restriction is held to be proper but with the following added comment that the apparatus (or product) could have been made as an integral unit rather than by carrying out the process steps recited in claim 1. With this additional caveat, with Applicant's comments on the Restriction is now **made Final**. The Office repeats that Applicants are required to cancel all non-elected claims or take other appropriate action and also requests that Applicants show cause why Applicants failed to cancel these non-elected claims prior to this Office Action.

An Office Action on the merits of Claims 1-22 follows.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is held that the recitation... using the semiconductor fabrication process... in these claims is so vague and indefinite that the Patent Office has little or no choice but to hold that these claims do not meet the criteria set out in 35 U.S.C. 112 (2nd Para). That is the claims do not particularly point out nor distinctly claim the invention. What, for example does this limitation include? Hat does this limitation exclude? What is ...a semiconductor fabrication process...?

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3729

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Isen et al (Pat No. 5,763,058) hereinafter Isen et al.

Isen et al teach an electrical circuit component formed of a conductor printed on a substrate, A circuit is formed on a flexible substrate (Cf. Col 3). In Columns 11 and 12 Isen et al teach (Cf. also Figure 8) that a battery can be made such that electrodes 816 and 820 and having an electrolyte 818. It would have been obvious to place the battery between two insulation layers if in fact Isen et al do not teach that this has been done in order to provide a flexible battery with all the attribute therewith. In Column 8 Isen et al teach that there can be a lamination means (instead of a printing means) to laminate a plastic onto a surface which has an electrically conductive pattern. Also Isen et al teach that there can be holes i.e. vias in the insulator which can connect to electrically conductive patterns. It would have been obvious to provide a battery if in fact Isen et al do not expressly teach such a battery on an insulating layer with terminals and thus form a flexible circuit board. As applied to claims 6 it is held to be within the ordinary skill of an artisan to remove a portion of a first insulating layer in order to make room for at least one battery. As further applied to claim 13 it is held to have been obvious to use a polyimide (thermoplastic) because of its well known high flexibility and heat resistance. As applied to claims 21 and 22 it is held that the limitations in these claims are mere matters for design choice inasmuch as Applicant advances no particular purpose therefore nor solves any specific problems therewith.

Art Unit: 3729

Applicant's Remarks filed on or about 31 August 2006 have been carefully reviewed. With respect to the Office's rejection of claims 5 and 8 Applicant seemingly is of the opinion that a battery can be made from chemical vapor deposition, physical vapor deposition, electrochemical deposition, molecular beam epitaxy, atomic layer deposition or the like. If that is true perhaps Applicant should draw dependent claims which clearly define what Applicant intends rather than write ... using a semiconductor fabrication process... .

Isen et al indeed discloses a battery albeit a printed version rather than a battery as a commonly thought of flashlight battery. Applicant takes issue that the Patent Office inadvertently construed the term "battery" much too narrowly. Applicant is attempting to make an issue when none is present.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 3729

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. J. Arbes whose telephone number is 571-272-4563. The examiner can normally be reached on M, T, R and F from 8 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, P. Vo, can be reached on 571-272-4563. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



C. J. Arbes
Primary Examiner
Art Unit 3729